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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/809,954      | 03/26/2004  | Toshiki Taguchi      | Q80737              | 7799             |

23373 7590 03/09/2006  
SUGHRUE MION, PLLC  
2100 PENNSYLVANIA AVENUE, N.W.  
SUITE 800  
WASHINGTON, DC 20037

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| EXAMINER |
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KLEMANSKI, HELENE G

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| ART UNIT | PAPER NUMBER |
|----------|--------------|

1755

DATE MAILED: 03/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                  |                  |  |
|------------------------------|------------------|------------------|--|
| <b>Office Action Summary</b> | Application No.  | Applicant(s)     |  |
|                              | 10/809,954       | TAGUCHI, TOSHIKI |  |
|                              | Examiner         | Art Unit         |  |
|                              | Helene Klemanski | 1755             |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/29/04&amp;8/5/04</u> . | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The references cited in the Search Report dated June 25, 2004 have been considered.

### ***Claim Objections***

2. Claims 2 and 8 are objected to because of the following informalities: in claim 2, the ninth line after formula (1), the term "the" should be inserted between the terms "2," and "A's"; also in claim 2, the tenth line after formula (1), the term "the" should be inserted between the terms "and" and "B's" and in claim 8, line 5, the term "each" should be deleted and inserted between the terms "inks" and "contain". Appropriate correction is required.

### ***Double Patenting***

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to

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be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-21 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-5, 7 and 10-12 of U.S. Patent No.

6,874,882. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the present application overlap said patent claims and would be obvious thereby.

5. Claims 1-3 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 8 and 11-13 of U.S. Patent No.

6,582,502. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the present application overlap said patent claims and would be obvious thereby.

6. Claims 1-3 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-3 and 8-11 of copending Application No. 10/714,945 (US 2004/0154496). Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the present application overlap said patent claims and would be obvious thereby.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

7. Claims 1-21 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-3, 7 and 8 of

copending Application No. 10/811,395 (US 2005/0004260). Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the present application overlap said patent claims and would be obvious thereby.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

8. Claims 1-21 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-3 and 5-11 of copending Application No. 10/645,797 (US 2004/0053988). Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the present application overlap said patent claims and would be obvious thereby.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

In the above references, it is the examiner's position that it would have been obvious to one having ordinary skill in the art that the ratio of a total atomic weight of hetero elements contained in a dye molecule to a dye molecular weight is from 40 to 90% since the dyes of the above references are the same dyes as claimed and disclosed by applicants.

***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

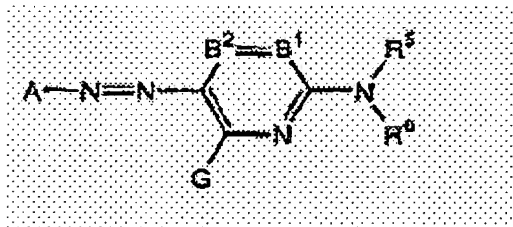
A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

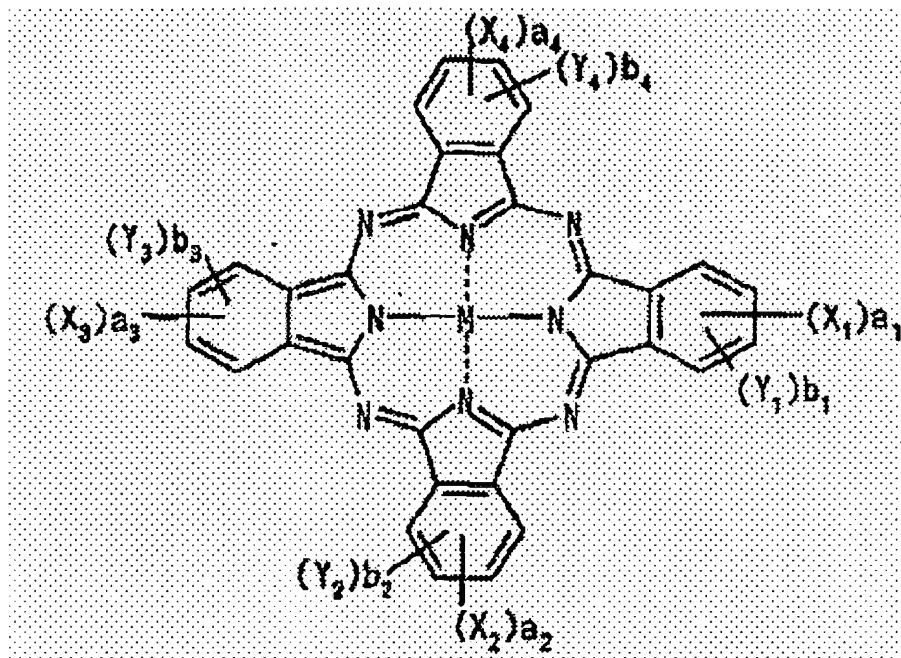
(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 1-19 are rejected under 35 U.S.C. 102(a) as being anticipated by EP1384762.

EP1384762 teaches an inkjet ink set comprising a yellow ink, a magenta ink and a black ink wherein each of the above inks contain a dye, a water-miscible organic solvent such as ethylene glycol and water. The magenta ink comprises an azo dye of the formula



wherein the substituents are defined in the specification. The cyan ink comprises a phthalocyanine dye having an oxidation potential of higher than 1.0 V (vs SCE) of the formula



wherein the substituents are defined in the specification. The inkjet ink set also contains a dark yellow ink that comprises the above azo dye and the above phthalocyanine dye. The inkjet ink set may also contain a light magenta ink and a light cyan ink wherein the light magenta ink contains the above azo dye and the light cyan ink contains the above phthalocyanine dye in smaller concentrations than the magenta and cyan inks. EP1384762 further teaches an ink jet printing method comprising ejecting the above ink set onto a recording medium. See page 2, line 54 – page 4, line 43, page 8, line 39 – page 9, line 20, the azo dyes on pages 10-22, page 23, lines 11-17, page 32, lines 28-30, the phthalocyanine dyes on pages 33-49, page 50, lines 42-48, page 53, lines 26-32, page 60, lines 40-44, example 4-Table 15, example 11-Table 15 and claims 1-5. The inkjet ink set as taught by EP1384762 appears to anticipate the present claims.

The only limitation in the claims not found by the examiner is the ratio of a total atomic weight of hetero elements contained in a dye molecule to a dye molecular weight is from 40 to 90%. However, this limitation is considered inherent because there does not appear to be any reason why the cited reference would not contain a dye with applicants claimed ration since the dyes of the above reference are the same dyes as claimed and disclosed by applicants.

Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

11. Claims 1-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Taguchi et al. (US 6,874,882)

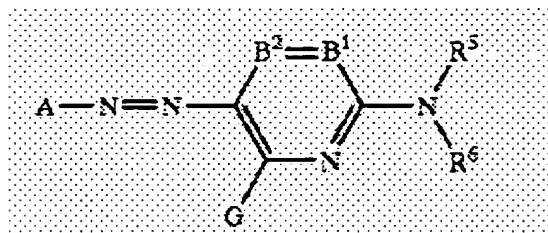
The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Taguchi et al. teach an inkjet ink set comprising at least three kinds of inkjet inks, each comprising a coloring agent dissolved or dispersed in an aqueous or oily medium wherein the ratio of any two of the forced discoloration rate constants is from 0.5 to 2.0. The inkjet ink set preferably comprises a magenta ink, a light magenta ink, a cyan ink, a

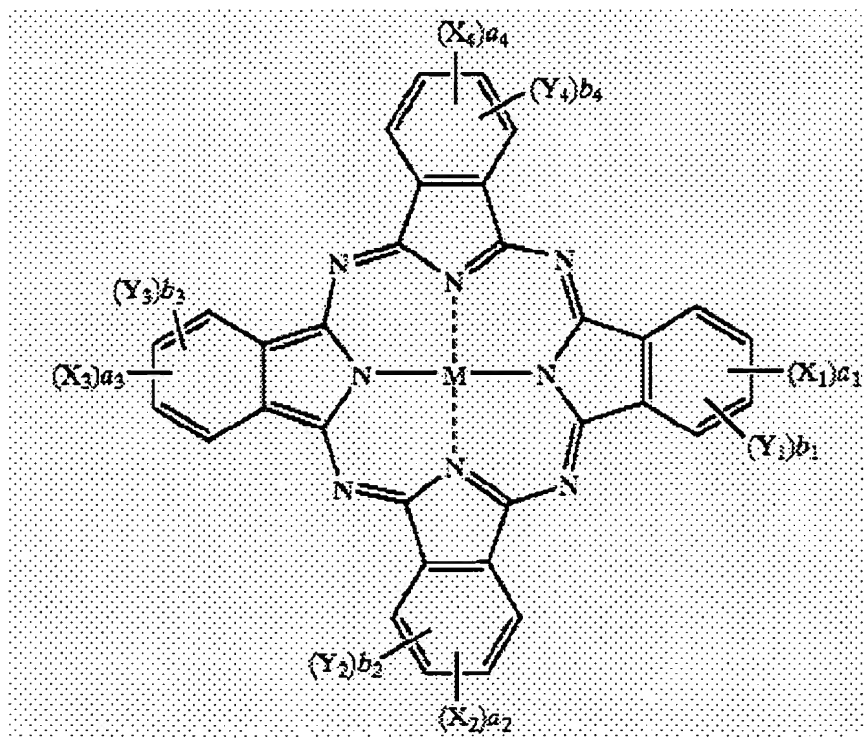


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light cyan ink, a yellow ink, a light yellow ink and a black ink. The magenta and light magenta inks each comprise an azo dye of the formula



wherein the substituents are defined in the specification. The cyan and light cyan inks each comprise a phthalocyanine dye having an oxidation potential of higher than 1.0 V (vs SCE) of the formula



wherein the substituents are defined in the specification. The yellow and light yellow inks each contain a yellow dye such as an aryl- or heteryl-azo dye. The black ink contains a coloring including a dye and/or pigment. The aqueous medium comprises a

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mixture of water and a water-miscible organic solvent such as ethylene glycol. Taguchi et al. further teaches an ink jet printing method comprising ejecting the above ink set onto a recording medium. See col. 2, line 26 – col. 4, line 18, col. 5, line 13 – col. 6, line 10, col. 6, lines 20-65, col. 9, line 32 – col. 10, lines 10, col. 15, line 65 – col. 17, line 2, the azo dyes in col. 19 – col. 50, col. 51, lines 1-54, col. 63, line 14, the phthalocyanine dyes in col. 63 – col. 90, col. 91, lines 56-61, col. 92, lines 10-24, example 1, Table 25 and claims 1-5 and 8-13. The inkjet ink set as taught by Taguchi et al. appears to anticipate the present claims.

The only limitation in the claims not found by the examiner is the ratio of a total atomic weight of hetero elements contained in a dye molecule to a dye molecular weight is from 40 to 90%. However, this limitation is considered inherent because there does not appear to be any reason why the cited reference would not contain a dye with applicants claimed ration since the dyes of the above reference are the same dyes as claimed and disclosed by applicants.

Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

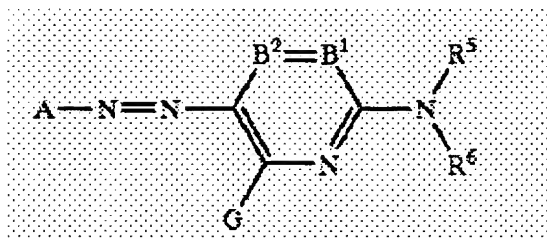
12. Claims 1-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Taguchi et al. (2004/0053988)

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome

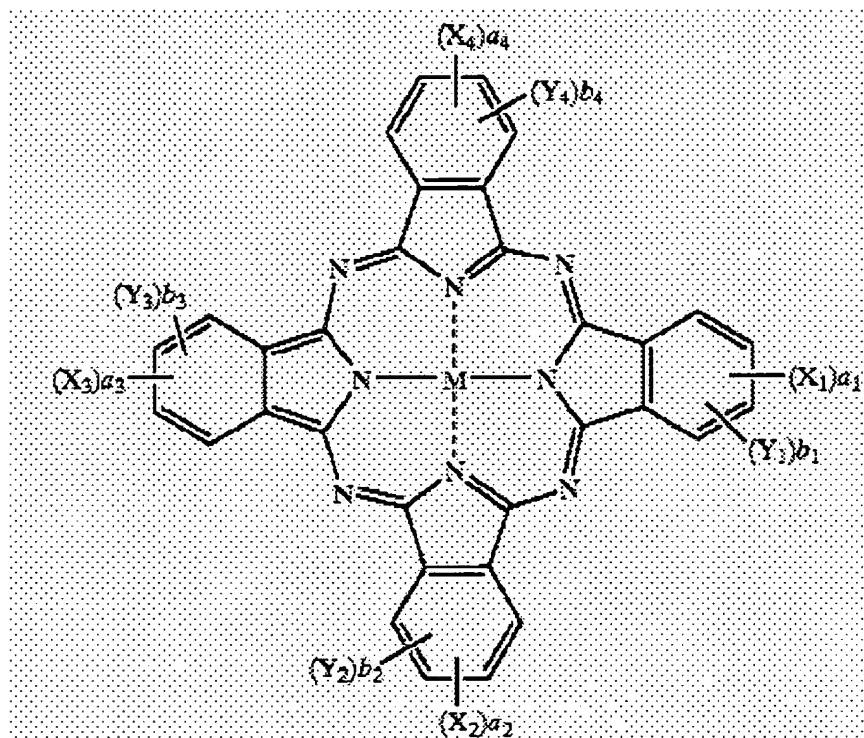
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either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Taguchi et al. teach an inkjet ink set comprising a magenta ink, a light magenta ink, a cyan ink, a light cyan ink, a yellow ink, a light yellow ink and a black ink. The magenta and light magenta inks each comprise an azo dye of the formula



wherein the substituents are defined in the specification. The cyan and light cyan inks each comprise a phthalocyanine dye having an oxidation potential of higher than 1.0 V (vs SCE) of the formula



wherein the substituents are defined in the specification. The yellow and light yellow inks each contain a dye of the formula



wherein  $A^{11}$  and  $B^{11}$  each independently represents a heterocyclic group, which may be substituted. The black ink comprises a dye of the formula



wherein A, B and C each independently represents an aromatic group or a heterocyclic group, which may be substituted; m is an integer of 1 or 2 and n is an integer of 0 or more, with the proviso that at least one of A, B and C is a heterocyclic group that may be substituted. The aqueous medium comprises a mixture of water and a water-miscible organic solvent such as ethylene glycol. Taguchi et al. further teaches an ink

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jet printing method comprising ejecting the above ink set onto a recording medium. See para. 0010, paras. 0011-0025, paras. 0039-0045, paras. 0093-0095, the azo dyes on pages 9-16, paras. 0116-0117, paras. 0124-0127, paras. 0177-0182, the azo dye on pages 22-38, para. 0207, paras. 0218-0221, the phthalocyanine dyes on pages 46-60, paras. 0305-0308, the azo dyes on pages 64-77, paras. 0341-0342, Table B-Ink Sets 102-105 and claims 1-3 and 5-11. The inkjet ink set as taught by Taguchi et al. appears to anticipate the present claims.

The only limitation in the claims not found by the examiner is the ratio of a total atomic weight of hetero elements contained in a dye molecule to a dye molecular weight is from 40 to 90%. However, this limitation is considered inherent because there does not appear to be any reason why the cited reference would not contain a dye with applicants claimed ration since the dyes of the above reference are the same dyes as claimed and disclosed by applicants.

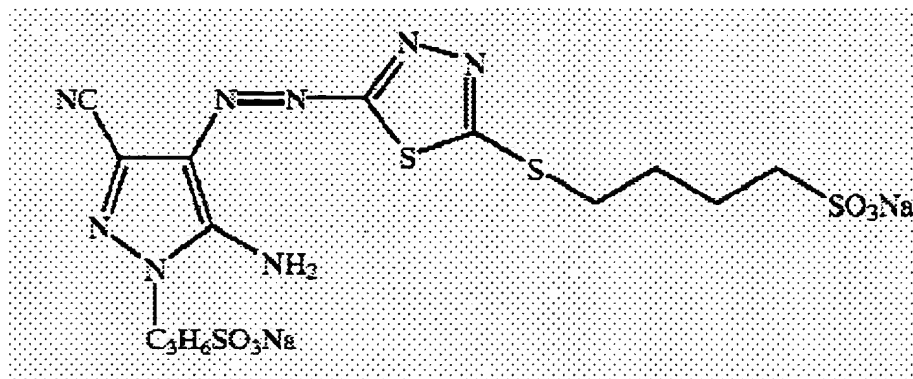
Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

13. Claims 1-4 are rejected under 35 U.S.C. 102(e) as being anticipated by Fujiwara (US 6,582,502)

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in

the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Fujiwara teaches an ink composition comprising an azo dye of the formula



wherein the ratio of a

total atomic weight of hetero elements contained in a dye molecule to a dye molecular weight is .52 (i.e. 52%; as calculated by the examiner from applicants explanation on page 225 of the specification) and an ink set that contain the above ink composition. See col. 1, line 60 – col. 4, line 49, dyes 1-1 to 1-5 (specifically dye 1-5), col. 25, lines 10-15, examples 1 and 2 and claims 1, 8 and 11-13. The inkjet ink set as taught by Fujiwara appears to anticipate the present claims.

### ***Conclusion***

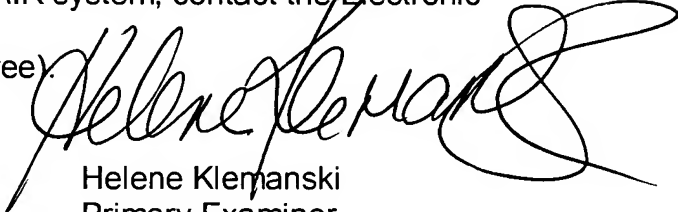
The remaining references listed on forms 892 and 1449 have been reviewed by the examiner and are considered to be cumulative to or less material than the prior art references relied upon in the above rejections.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helene Klemanski whose telephone number is (571) 272-1370. The examiner can normally be reached on Monday-Friday 5:30-2:00.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on (571) 272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Helene Klemanski  
Primary Examiner  
Art Unit 1755



HK  
March 6, 2006